

**AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows:

**LISTING OF CLAIMS:**

1. (Original) A process for producing vitamin C from L-sorbose which comprises contacting L-sorbose with a purified L-sorbose dehydrogenase having the following physico-chemical properties;

- a) Molecular weight:  $150,000 \pm 6,000$  Da or  $230,000 \pm 9,000$  Da (consisting of 2 or 3 homologous subunits, each subunit having a molecular weight of  $75,000 \pm 3,000$  Da)
- b) Substrate specificity: active on aldehyde compounds
- c) Cofactors: pyrroloquinoline quinone and heme c
- d) Optimum pH; 6.4 to 8.2 for the production of vitamin C from L-sorbose
- e) Inhibitors:  $\text{Co}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Fe}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Zn}^{2+}$ , moniodoacetate and ethylenediamine tetraacetic acid,

wherein the conversion of L-sorbose to vitamin C is catalyzed by the purified L-sorbose dehydrogenase in the presence of an electron acceptor, and isolating the resulting vitamin C from the reaction mixture.

2. (Original) The process for producing vitamin C from L-sorbose according to claim 1, wherein the L-sorbose dehydrogenase is derived from the strain *Gluconobacter oxydans* DSM No. 4025 (FERM BP-3812), a microorganism belonging to the genus *Gluconobacter* having identifying characteristics to *G. oxydans* DSM 4025 (FERM BP-3812) or its mutants.

3. (Currently amended) The process according to claim 1 ~~claims 1 and 2~~,  
wherein the reaction is carried out at pH values of about 6.4 to about 9.0 and at a  
temperature range from about 20°C to 60°C for about 0.5 to 48 hours.

4. (Currently amended) The process according to claim 1 ~~any one of~~  
~~claims 1 and 2~~, wherein the reaction is carried out at pH values of about 7.0 to 8.2 and  
at a temperature range from about 20°C to 50°C for about 0.5 to 24 hours.